"Copy"
of
Medical Officer of Health's report to the Dursley Rural District Council.

Population in 1891	12.166
Area in acres	26.521
Inhabited houses	3.116

The district consists of 11 Parishes viz:— Cam, Coaley, Dursley, Kingswood, North Nibley, Symphsfield, Uwlpen, Slimbridge, Stinchcombe, Uley, and Wotton-under-Edge. Inspector of Nuisances Mr. J. Robinson Silver Street Dursley.

Sir,

The Rural district of Dursley is situated on the sides and buttresses of the Western Cotswolds which consists largely of the white lime-stone. Many of the houses are built upon the hill sides or on the abutments which run out to different distances into the valley of the Severn. Slimbridge is the only parish wholly situated in the valley; so that for the most part the district is naturally well drained. The chief streams which drain the district are the Cam which drain,

Uley, Dursley, and Cam, and receives the drainage of Coaley, and empties itself into the Berkeley and Gloucester Canal. The Ribley Brook which drains North Ribley and empties itself into the Malford Brook. The Dyers Brook and Alderly Brook which unite at Kingswood, these drain Wotton-under-Edge, and Kingswood, and joins the Wickwar Brook. The Wickwar Brook is a boundary between the Dursley Rural District, and the Chipping Sodbury and Thornbury Rural District.

None of these streams are used for drinking purposes by human beings. The chief sources of pollution which enter these;- are the sewage of Uley, Dursley, and Cam, not the whole only a part.

The Cloth Manufactory Cam, the Patent Leather Works, the Flour Mills, two Breweries The River's Mill Tannery, and the Pin Mill pollute the Cam. The polluting agents of the Ribley Brook are sewage from a few scattered residences along its course from the two flour Mills and the washings of farmyards during heavy rains.

The Dyer's brook is polluted by a brewery and a flour Mill. The Alderly Brook by sewage and other waste from Mill Mill. These brooks unite at Kingswood and receives pollutions from two silk mills, The Pin Mill, and Ithells Stock Mill.

These streams are also polluted by some sewage from Wotton-under-Edge and Kingswood. But there is no system of

The Wickwar Brook receives the sewage of Wickwar, and the Wickwar Brewery. This is a small stream, and is slow in its motion. It is the foulest stream in the district, and in the summer time is often a nuisance dangerous to health. It has placed upon it, and near the Wickwar Brewery some sewage works, but they cannot be said to have abated the nuisance. This is the only stream in the district with anything approaching to sewage works to prevent its pollution.

The Water Supply

During the year 1894 the Wotton-under-Edge water works were brought to a successful completion, and on October 1 was opened by Lord Fitzhardinge. The total loans granted by the Local Government Board for these works amount to £3,500 but the actual costs of the works is about £3,400. The supply was given by his lordship; it is collected from several small springs on a part of the hill side known as Hamlyns Brake and is probably 400 or 500 ft above the lowest parts of the town. It is conveyed in iron pipes to the main tank; which is about 300 or 400 ft above the lowest parts of Wotton-under-Edge. There are about five miles of iron pipes laid for the supply of so much of the town as is included in the water area. The tank contains 99,000 gallons reckoned to be a three days supply. The population of Wotton-under-Edge is about 3000 the outside number expected to be supplied is 2000.

At the end of 1894 it was laid on to about 130 houses or was about to be laid on. This supply of good water and the analysis made by Mr Stoddart city analyst of Bristol, showed it to be a very good water: sl

improve the sanitary condition of the district, for in addition to the increased quantity of wholesome water, either in or close to the dwelling-houses for use for domestic purposes; there will be an abundance for the flushing of the street-gutters, which in the summer are such a nuisance and so dangerous to health. In connection with the above supply between Nov 28th and Dec: 17th I with Mr Robinson ~~as~~ the inspector of nuisances made, at the request of the then Dudley Rural Sanitary Authority a house to house survey of Rotton-under-Edge to ascertain what the water supply was to each. We made 458 visits, or to all houses within the water area, not having had it laid, or had given orders to have it laid on.

This survey was for the purpose of enabling the Authority to compell the owners to have it laid on in all cases where there was not within reasonable distance an available supply of wholesome water sufficient for the consumption and use for domestic purposes for the inmates of such dwelling-houses. As per Public Health (water) Act 1878

For magnitude of water works Rotton-under-Edge takes the lead in the district. But for years the parishes of Coaley and Kingswood have had their water supplies Coaley is supplied by a spring on the hill side from which is laid a system of pipes with stand pipes at different distances down the main road of the village.

Kingswood gets its water supply from the hill-side opposite to Wotton-under-Edge and is conveyed through Sinwell in iron pipes, it is also supplied partly by stand pipes, and partly laid low. All are under the control of the Dursley Rural District Council. The other parishes are supplied by wells either shallow or deep, with or without pumps, or from springs. Dursley is largely supplied by the Broadwell from which it is carried in buckets etc to the upper parts of the town. But the question of a water supply for the town is under consideration. There can be no doubt that the water supply from wells is very unsatisfactory and especially where house after house it is the well and the privy the well and the privy, and as is frequently the case in a disagreeable and dangerous proximity to each other.

The Disposal of Sewage

The disposal of sewage:- Dursley is of all the places in the District the most perfectly supplied with sewers. Although these are in their construction in places very imperfect. So that more sewage is water borne from Dursley than from any other place, some is also from Uley and some from Cam; and so polluted was the stream that the Gloucestershire County Council two or three years ago commenced to urge the then, Dursley

Rural Sanitary Authority to take steps to prevent the pollution of the stream with the result that the water closets at the workhouse were taken off; dust bins were provided in Back St along the course of the Broadwell which was the portion of the stream most polluted; the bed of the Broadwell stream and the Mill pond on the stream were cleaned out and every Saturday the sluices for some hours are thrown open, so that the bed of the stream and the ponds are thoroughly flushed. These steps being taken to purify the stream the County Council withdrew further action in the early part of 1894.

Sewers Sometime ago I suggested the laying of a sewer down Back St so as to remove the sewage from the Broadwell stream and carry it lower down to the bottom of the town.

In the early part of 1894 Her Majesty's Inspector of Factories wrote me respecting this nuisance & replied informing him the subject was under consideration. Since that time it seems to have fallen through. Still it is most desirable that the sewage should not be passed continually through the Pin Mill; there are still complaints made respecting it and there can be no doubt it is a nuisance dangerous to health.

Inspection & Work I have inspected nuisances complained of in respect of privies, pigsties, ashpits, water-courses, sewers, drains, etc to the number of 38. In April the 24th I with Mr Robinson made

a sewer of Ringwood inspecting many places. All the above nuisances were placed in his hands and have been remedied. I may mention that several inspections were made under the provisions of the Bye laws which applies to the contributory place of Dursley, and which came into force in March last.

Sewer Inspection

Under the Public Health Act 1875, Sec: 46 Three cottages were visited and inspected by me, one at Hilling, North Nibley, which was considered not to come under the provisions of the Act the second at Windson, Uley, & the third at Stonehill, Symphfield. These I advised that the powers of the section be enforced.

Housing of Working Classes Act 1891

Under the above Act a cottage was inspected by myself and Mr Robinson at Swinehay North Nibley; here on my recommendation a closing order was issued. It was put in repair and made tenantable and relet. A second cottage in Organ's Court, Long St, Dursley, in a tumble-down condition was inspected by me on October the 8th. A closing order was recommended and issued by the authority as a preliminary step, then by Sec: 53 to pass a resolution "that it is expedient to order the demolition of the building."

Over-crowding

No case of over crowding was brought to my notice during the year

The lodging-houses

I with Mr Robinson inspected the two lodging-houses in Wotton-under-Edge on April and again in November. In April the spring

lime-washing had not been done. In November both were satisfactory. There is no lodging house in Dursley.

Bakehouses and Slaughterhouses.

Between September 28th and October 24th we visited and inspected all the bake-houses and slaughter-houses in the district. Of the 36 Bakehouses visited 29 were satisfactory, 7 we advised lime-washing and greater cleanliness generally. Of 32 Slaughter-houses visited 25 were satisfactory and in 7 we advised greater cleanliness.

New dwelling houses.—

Nine new buildings and one old one primarily built for a cottage, only recently completed as such, were inspected by Mr. Robinson and myself. all were satisfactory except one at Wotton-under-Edge, in which case I recommended a withholding of the certificate on account of its unfinished state, when finished I again inspected and signed the certificate; in all the above cases the water supply was considered satisfactory.

Analyses Five samples of water were examined by me during the year and all found fit for domestic use.

Infectious Diseases In addition to the above inspections I have made during the year 55 visits of inspection in connection with Infectious Diseases and a great many opportunities were found for making suggestions likely to improve the Sanitary surroundings of such homes as well as also to prevent the spread of the maladies.

Closing of Schools.

The Public Elementary School Cambridge was closed on account of the presence of Scarlatina in the village in the month of February for fourteen days, and after opening it was deemed advisable to reclose the school again in April. The Infant School Lower Cam was obliged to be closed in the month of March for about six weeks on account of Scarlatina in the School-house. In October it was thought advisable to close the Public Elementary School, Coaley, for one month, after reopening a member of the school master's family became infected so that the school was closed again on Nov: 24th. and until the end of the first week in January 1895. Scarlatina has been more or less prevalent during the year in the Northern part of the district; Dursley Cam, Slimbridge and Coaley have all been affected by the disease. Occassional cases have occured in other parts not to the same extent. There is little doubt that it was conveyed from Slymbridge to Coaley through relatives visiting an infected home or being visited by some one from an infected home. The disease was mild in type, two or more families became infected by it before the disease was properly recognised there having been no Medical Attendant hence children from infected homes carried it to school so that the village became infected from one end to the other. At the end of the year as far as I know Cam was free of the disease but it was still

lurking about Dursley, Coaley, and Slymbridge. Two deaths only occured from the disease, one a child, the other an adult. The Notification of Infectious Disease Act is not in force in this district. It was not proposed to discuss the adoption of the Act at any meeting of the Authority in 1894.

The Gloucestershire County Council in their report for 1893 regrets that it is not adopted. There are six other Authorities that have not adopted the Act in the County. There can be no doubt that compulsory Notification properly worked, that is, promptly put into action at the commencement of an outbreak of a dangerous infectious disease, should by early information as to its presence, put into the hands of the authorities and their officials enable them to do much to check the extension of it. So that its adoption ought to be of great service to the district. But when the disease is very mild in type as has been the case in Dursley and Coaley, children having been affected by it, the parents not thinking what was the matter no Medical attendant called in to give the disease a name and point out its dangers then Compulsory Notification is at a disadvantage and can do little to prevent its spread. People have yet to learn that disease is no respector of persons, names, Social Status professions trades or what not, and until they do they will not cease to play with it to the danger of others; but for the well being of whom, there is often displayed

the greatest possible indulgence.
The Infectious Disease (prevention) Act has been in force a year or two.

Isolation I am very strongly of opinion that Isolation is not practised in the stringest manner it should be and that properly carried out for a sufficient length of time would do much to check the spread of dangerous infectious disease especially is this the case with Scarlatina and it is highly necessary with others; but with Scarlatina it is as imperative as in the case of small pox. This is next to impossible in many cottages, hence the necessity for the combination of districts to provide an hospital, so strongly advocated by the Gloucestershire County Council for the treatment of such cases.

Influenza. Two deaths only were registered in which Influenza was registered as a complication, both on the Wotton. Under. Edge side of the district and both in the first half of the year. Although there is reason to believe that occasional cases occured in all parts of the district and in all seasons of the year, some of marked severity. There has been no prosecution during the year. I attended the meetings of the Board thirteen times during the year.

Vital Statistics The Estimation of the Population.
For the estimation of the population at all ages living at the middle of July 1894. I have adopted a down grade scale, and that is

taking place in the last thirty years. The loss is 38 per annum and the estimated population is 12043. The Births exceeds the deaths by 105 this is called the "Natural Increment" In this district in the past, for so long a period, both immigration and "Natural Increment" have been unable to balance emmigration. The Vital Statistics for the year 1894 are as follows viz:- There were 293 births registered during the year. Of these 152 were males and 141 were females. The birth rate per thousand of estimated population living at all ages at the middle of the year is 24·3. This is called "the crude birth rate" and it is exceedingly low It was 27·8 in 1893, 24·6 in 1892. It was 26·82 for the County of Gloucester in 1893, and for all England and Wales 30·7.

Deaths The deaths registered during the year were 188 of these 100 were males and 88 were females The death-rate for the year is according to estimated population 15·6 for 1893 it was 16·3 for the County of Gloucester it was 15·434 and for all England and Wales 19·1. This is the lowest death rate recorded for several years. A low death rate was general throughout the country.

The deaths arranged according to table "A" at various ages are as follows. Under 1 year 31, 1 and under 5, 9. 5 and under 15, 6. 15 and under 25, 3. 25 and under 65, 57. 65 and upwards, 81.

Infant Mortality —

The deaths under one year is 32 and the

rate of Infant Mortality is 109·2, in 1893 it was 160·8. The rate of Infant Mortality for the County of Gloucester is not given in the report for the year 1893, while that for all England and Wales was for 1893, 159 so that although a little higher than 1893 yet the death rate is very low, especially considering the district is not purely agricultural. Taking for comparison the groups of ages by far the larger number died in the period of old age, forty three died between 70 & 80, and twenty two died between 80 & 90.

Zymotic diseases and death-rate

The seven principle Zymotic diseases were the cause of death in 8 persons, two only of these were under 5 years old and these died of Diphtheria. Two died of Scarlatina, two of Diphtheria, Three of fever, and one of Diarrhea. The death-rate from the above diseases per thousand persons living is 66. In 1893 it was 1·98. The Zymotic death rate for the County of Gloucester is not given in the report for 1893. For all England and Wales it was 2·47. In addition to the above, one died from membranous croup. two from puerperal fever, and one under five from rheumatic fever. No death occured in the district from Small-pox, Cholera Erysipelas Measles or whoop-cough. Thirteen deaths occured from the Acute Respiratory diseases and the death rate is 2·7. Seven died from Phthisis, Seventy one from Heart Disease; and five died from injuries.

The death-rate for the whole of the district per thousand of estimated population for each district for the year is as follows - Dursley 14·7. Uley 14·10 Wotton 17·8. But the losses of Health in Wotton-under-Edge was not from any preventable disease, livenly were caused by the Acute Respiratory Diseases, only 13 in the other two districts combined; 11 from heart disease, 10 in the two other districts; 42 died in old age, only 39 in the other districts.

Vaccination is under the control of the Board of Guardians, but it is a question of Public Health which is my excuse for introducing the subject and showing the result. When on Sept 28th the proposition was put to the Board of Guardians, as to making or continuing to make vaccination compulsory after a debate lasting for some time in which several of the Guardians took part. Not one guardian voted in its favour. The Chairman only had the courage to record his. So that from the above date vaccination in the Dursley Rural Sanitary District is voluntary and therefore no longer compulsory. From information received from those in the district who vaccinate the most of the children vaccinated. I am of opinion that the evidence goes to show that since the above proposition was discussed and decided on, vaccination has gone down. For myself it is almost nil.

Prospective. The above result will show the necessity of providing an Isolation hospital as soon as possible, as an alternative measure for checking the ravages of small-pox.
The adoption of the Infectious Disease (Notification) Act will become of still greater importance.
In addition to the above measures, the supply of Dudley with water, will be to the front, possibly also time, may be found for seriously considering the laying of the sewer down Back St, so as to remove the sewage from the Broadwell stream. The purification of the Wickwar Brook will again force itself upon the attention of the Authority especially if the summer be dry and hot. These together with other subjects of minor importance will come up for consideration and action.

Table "B" The sickness table (Table "B") is necessarily very defective inasmuch as the Infectious Disease (Notification) Act is not in force in the district. The information is gathered from the District Medical Officer's Relief Books, and what could be picked up from various sources, all very unsatisfactory.
Appended is the annual report of work done by Mr. E. Robinson Inspector of Nuisances.

I remain
Your Obedient Servant
Francis Jas Joyce
Medical Officer of Health.

Feb 16th 1895

Annual Report for 1894

Summary of Nuisances abated from December 31st 1893 to December 31st 1894

Dwelling Houses	
Overcrowding Abated	3
Closed as unfit for habitation	2
Delapidated and Repaired	4
Cleansed and Disinfected	28
Water supply remedied	5
Closets	
New Provided	3
Rebuilt and Repaired	22
Cleansed	40
Drains	
New Provided	2
Defective Remedied	26
Foul ditches cleansed	5
Other Nuisances	
Offensive refuse removed	8
Pig Nuisances Abated	7
Offensive Cesspools Cleansed	2
Total	157
Number of nuisances abated without formal notice	66
Statutory notices served	91
Summons issued	0
Total	157

I have visited 101 Registered Dairies and Milkshops in this district. There have been two outbreaks of Scarlatina and one death on Registered premises but every precaution was taken and cows removed until the premises were thoroughly timewashed and disinfected.

I am Gentlemen
Your Obedient Servant,
Thomas Robinson

February 19th 1895.

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Table of Deaths during the year 1894, in the Dorsley Rural District

Classified according to Diseases, Ages, and Localities.

Localities adopted for purpose of these statistics; public institutions being shown separate localities. Population for Births are on table (B). (a)	Mortality from all causes at subjoined ages: at all ages (b)	Under 1 year (c)	1 and under 5 (d)	5 and under 15 (e)	15 and under 25 (f)	25 and under 65 (g)	65 and upwards (h)	(i)	Mortality from subjoined causes, distinguishing Deaths of Children under Five Years of Age: 1. Small-pox	2. Scarlet fever	3. Diphtheria and Croup	4. Erysipelas	5. Fever: Typhus	6. Enteric or Typhoid fever	7. Continued	8. Relapsing	9. Puerperal	10. Cholera	11. Dysentery	12. Measles	13. Whooping-cough	14. Influenza	15. Malaria fever	16. Plague	17. Cholera infantum	18. Bronchitis, pneumonia, pleurisy	19. Heart disease	20. Injuries	21. All other diseases	22. Totals.
								Under 5																		5			16	21
...ey District	75	21	1	3	2	20	24	5 and upwards		2		1		2			1								5	3	6	2	28	50
								Under 5																							
...orkhouse	5					3	2	5 and upwards																			2		3	5
								Under 5			2												1						1	4
...ey District-	27	1	3	1		9	13	5 and upwards														1			2	5	2	1	12	23
								Under 5																		7		1	7	15
...rn-under-edge District	85	10	5	2	1	25	42	5 and upwards						1			1									13	11	1	43	70
Totals	188	32	9	6	3	57	81	Under 5			2												1			12		1	24	40
								5 and upwards		2		1		3			2					1			4	21	21	4	86	148

Table of Population, Births, and of New Cases of Infectious Sickness, coming to the knowledge of the Medical Officer of Health, during the year 1894 in the Dursley Rural District; classified according to Disease, Ages, and Localities.

Localities for the use of these Districts: Public Institutions being given as separate Districts. (a)	Population at all ages: Census 1891 (b)	Population at all ages: Estimated to middle of 1894 (c)	Registered Births (D)	Aged men 5 or over 5 (e)	1 Small Pox	2 Scarlet Fever	3 Diphtheria	4 Membranous Croup	5 Fevers: Typhus	6 Fevers: Enteric or Typhoid	7 Fevers: Continued	8 Fevers: Relapsing	9 Fevers: Puerperal	10 Cholera	11 Erysipelas	12	13	Number of such cases removed from their homes in Rural Localities for treatment in Isolation Hospitals
				men 5		7												
y District and orkhouse	5242	5189	141	5 & upwards		51	3		1	2					5			
				men 5														
				5 & upwards														
				men 5		5	2											
ley District	1926	1907	32	5 & upwards		25												
				men 5		2												
ineridge district	4998	4947	120	5 & upwards		2				2	1							
				men 5														
						14	2											
s	12166	12043	293	5 & upwards		78	3		1	4	1				5			

Infectious Disease is not Compulsory in the District. There is no Isolation Hospital in the District